

# Training the 21st-Century Joint Force

Ben Ennis

**T**he Interservice/Industry Training, Simulation and Education Conference (I/ITSEC) is billed as the world's largest gathering of military, industry and academia focused on training and simulations. "Training transformation continues to be influenced by technology advancement while responding to the requirements of combat and security operations on a broad front," related RADM Fredrick L. Lewis, U.S. Navy (USN) (Ret.), President, National Training and Simulation Association. Lewis feels that modeling and simulation (M&S) plays a vital role in preparing trainees to perform their best in challenging, real-world circumstances. Likewise, he views M&S as more than a desirable asset and, in many cases, indispensable to national preparedness and national security.

Soldiers from the U.S. Army's B Troop, 3rd Squadron, 71st Cavalry Regiment (Recon) (3-71st Cav), 10th Mountain Division (Light), participate in combat training at the Joint Readiness Training Center (JRTC), Fort Polk, LA. The training at JRTC simulates/replicates combat situations the Soldiers will face once deployed. The 3-71st Cav will finish their 16-month rotation to Afghanistan in June 2007. (U.S. Army photo by MSGT Johan Charles Van Boers.)





The recent I/ITSEC theme focused on “Training the 21st-Century Joint Force.” Lewis moderated an I/ITSEC-sponsored Joint general/flag officer panel. The panel was chaired by Dr. Paul W. Mayberry, Deputy Under Secretary of Defense (DUSD) (Readiness). Other panel members included VADM James K. Moran, Commander, Naval Education and Training Command (NETC); LTG Thomas Metz, Deputy Commanding General/Chief of Staff (DCG/CoS), U.S. Army Training and Doctrine Command (TRADOC); MG Jason Kamiya, Commander, Joint Warfighting Center

and U.S. Joint Forces (USJFCOM) Director of Training; BG Douglas Stone, CG, Marine Air Ground Task Force Training Command (MAGTF TC); BG S. Taco Gilbert III, Director, Air Force Smart Operations (AFSO) 21, Office of the Secretary of the Air Force (OSAF); and RDML Cynthia A. Coogan, U.S. Coast Guard (USCG), Director of Reserve and Training. The panel addressed service and organization matters of specific concern while examining training policy influences and how they felt M&S should transform to help solve their respective training challenges. A

summary of panel members’ training transformation comments and M&S implications follows.

### **DUSD (Readiness)**

Mayberry praised the ingenuity, creativity and products that private industry brings to the training challenges DOD is trying to resolve. According to Mayberry, DOD wants to focus on transforming the Joint force to be a more capable, integrated operation. Overall, he feels the major training transformation challenges and opportunities require that DOD build and share industry successes, establish





An MQ-1 Predator student pilot and student sensor operator pilot "fly" a Predator Unmanned Aerial System during a training session inside a Ground Control Station cell. (USAF photo by TSGT Kevin J. Gruenwald.)

modular ship. "She is optimally manned. She has a core crew of 75. She is modular, which means that you're going to put a weapon system on her and then take it off," he explained. "You're going to put a sensor platform on her and then take it off. So how do you man that ship and how do you train the crew? We realized the old manning module would not work

standards and close the military services gaps and seams that require creative thinking and ideas. "In the Joint arena, we need to make training transformation a reality. This requires appropriate interchanges between various services and the interchanges needed to become routine," Mayberry remarked. The challenge is compounded because the acquisition process is too long and the requirements process is not well understood. "As we look out to the future, we continue to face these types of irregular warfare scenarios in which U.S. forces are currently fighting which will include security, stability, transition and reconstruction operations (SSTRO), in the traditional 'stable' of major combat operations," he added. "Certainly we, as an armed force, make tremendous contributions to those SSTRO areas,

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but it would be much more effective within the context of bringing all of our national and coalition powers to bear," Mayberry concluded.

### Commander NETC

Moran gave his perspective of how things are changing in the USN and what that means in terms of challenges for training Sailors. The new age Sailor is called the "Sea Warrior." The Sea Warrior is matched with the position and trained to fit the position at a certain cost.

A major Navy training challenge is that the number of ships is increasing and

manpower is decreasing as the Navy moves toward the total combat ship. The total combat ship will be modular, stealthy and optimally manned. Moran, using the Littoral Combat Ship as an example, described the new

for the modular ship, so we're building what we call 'hybrid Sailors' who will have skill sets drawn from multiple ratings. The train-to-qualify process is huge for us," Moran continued.

He contends that some skill sets, such as computer analysts, will be the same for all services, so the training and M&S effort should be the same for all services. In fact, Moran proposed that the services bundle the training and build simulators that support all services at a significant cost savings to DOD.

### DCG/CoS TRADOC

The Army is building a brigade-based Army. Metz feels this is a great strategy, but he is concerned that the Army may be trailing in a training strategy to support the new brigade combat teams (BCTs). As part of this "train up," the Army needs to learn how to grow brigade commanders. "I am not worried about the individual Soldier," Metz commented. "I am concerned about the leader of the

Soldier. How does the leader really learn how to use all of these pieces of equipment together so that they get more than the sum of the individual pieces of equipment? At the brigade level and above, it's too expensive to mobilize to train the leaders. We need to teach leaders to draw as much as possible from the systems they use. Simulation can certainly help train future Army leaders," Metz continued.

Metz firmly believes that a good way to promote M&S is to reward leaders for using the systems. Building on these technological capabilities, Metz explained the bandwidth/combat power relationship and how M&S technology can increase combat power exponentially. "I sincerely believe we can bring M&S into the combat zone

to train troops," Metz suggested. "As a commander in Iraq, I stressed that once troops rested they needed to be retrained to keep their combat skills sharp. The M&S community can help us do that. Simulation will help maintain high intensity capability and share experiences from combat."

Likewise, Metz strongly believes that the Joint Task Force Commands can greatly benefit from simulation to help what he refers to as the "human dimension." "From the corps commander, to the multinational commander to corporal — our successes rest in the

human dimension," Metz added. "How do you model culture?"

## USJFCOM Director of Training

We must realize the environment is much more than the military. We need to model political, military, economic, social, infrastructure and information factors in support of effects.

Kamiya echoed Metz's comments related to addressing the human dimensions that our military faces. He feels M&S systems are good at enabling training, but we need M&S to replicate the effects of all elements of national policy such as diplomacy and economics. "We must realize the envi-

ronment is much more than the military," Kamiya emphasized. "We need to model political, military, economic,



The USN is moving toward the total combat ship that will be modular, stealthy and optimally manned. Realizing the old manning module would not work for the modular ship, the Navy is training "hybrid Sailors" who will have skill sets drawn from multiple ratings. Here, a Sailor signals the launch of an aircraft from the catapult on an aircraft carrier's flight deck. (USN photo by PO3 Rob Gaston.)





Paratroopers from the U.S. Army's 82nd Airborne Division, Fort Bragg, NC, are hooked up as they prepare for a nighttime static line jump from a USAF C-17 Globemaster III aircraft. The paratroopers and the aircraft were training as part of Exercise Joint Forcible Entry. (USAF photo by TSGT Jerry Morrison.)

social, infrastructure and information factors in support of effects. Solutions aren't necessarily found in the military ranks."

Kamiya wants the military services and private industry to consider the following challenges that M&S can have significant impact on:

- We need to ask the question, "Are we doing the right thing, not whether we're doing things right?" Where can industry help?
- We need a rapid database development accessible to the total force.
- We need help in expanding distributed learning capabilities.
- We need support in being a service provider for training the National Guard for homeland defense and civil support missions. We need to make it available in a seamless transparent way to our Reserve forces as well.

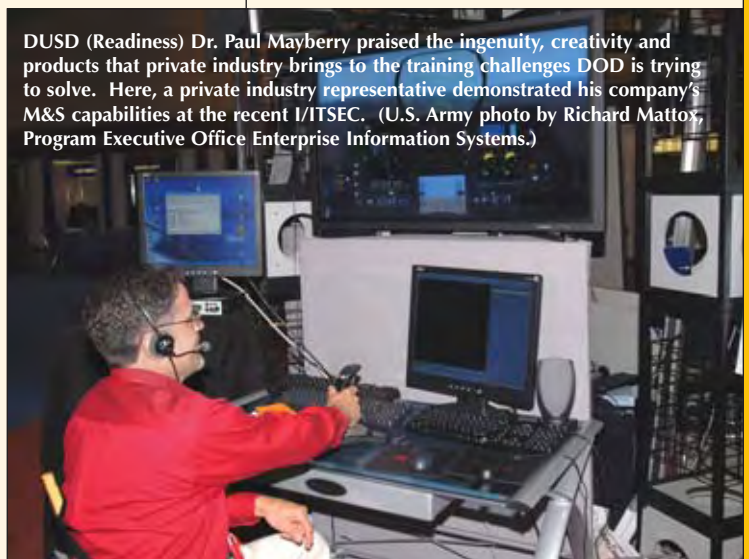
## CG MAGTFTC

Stone's command trains all Marines who go into Afghanistan and Iraq. He believes innovative technology will, ultimately, help improve training. He said he has the ground and space to train but cannot adapt as fast as the enemy. "The enemy changes faster than we can adapt on the ground, therefore, we need simulation [to close the gap]," Stone pointed out. "The training needs to be live, virtual, constructive and interoperative, and it would be better if we could do more training at home station. We

need simulation to help fight and win. The Marines are building the largest combined arms military operations on urban terrain facility in DOD, and we need to create all of this in simulation."

Stone gave a real-world example of how the Marines used simulation to

DUSD (Readiness) Dr. Paul Mayberry praised the ingenuity, creativity and products that private industry brings to the training challenges DOD is trying to solve. Here, a private industry representative demonstrated his company's M&S capabilities at the recent I/ITSEC. (U.S. Army photo by Richard Mattox, Program Executive Office Enterprise Information Systems.)



Marine LCPL Roberts tallies his score during 9mm pistol qualification. From individual small-arms weapons to crew-served weapons platforms, Soldiers, Sailors, Marines and Airmen can benefit tremendously from a combination of live, virtual and constructive training. (USN photo by CPO Eric A. Clement.)



solve a serious problem — how to prevent High Mobility Multipurpose Wheeled Vehicles (HMMWVs) from flipping over and being destroyed. The Joint Conflict and Tactical Simulation HMMWV Egress Assistance Trainer was used to simulate HMMWVs flipping over and give Marines confidence in exiting overturned vehicles. Stone

feels industry can help by continuing similar production and technological innovations with a wartime mentality, and to help develop decision-making tools and unique methods to train from a strategic perspective the Marine's junior leaders of tomorrow. Once developed, all simulation tools need to be thoroughly integrated.



A USCG crewman salutes as he steps aboard the medium endurance cutter CGC Campbell (WMEC 909). The USCG is actively training crewmen using M&S. Simulation training is performance-based and has helped crewmen adjust to a wide range of homeland security missions. (USCG photo by PO3 Luke Pinneo.)

## Director AFSO 21, OSAF

Gilbert refers to the current situation in the U.S. Air Force (USAF) as “The Burning Platform.” According to Gilbert, resource constraints continue to mount, equipment continues to age, manpower costs are escalating and energy costs are rising dramatically. Therefore, the simulation heights for the USAF are continuing to be pushed. Gilbert is optimistic about where simulation will take his service in the future. “The USAF has created a marriage between process improvement and flight training, but we have only scratched the surface. I feel we are underutilizing the investment we have.”

## USCG Director of Reserve and Training

Coogan emphasized that the USCG wants to ensure the training provided is performance-based. Referring to all Coast Guardsmen as ‘The Performer,’ Coogan remarked, “The Performer is the center of our universe. We strive to equip people to ensure performance. The challenge is to reduce high-cost training. The deepwater systems platform is the USCG future. The challenge is using simulators to train the crew, and we are excited about receiving our first small-boat simulators,” Coogan concluded.

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